## **CLAIMS**

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- 1. Use of a pharmaceutically acceptable agent being able to acidify the cell cytoplasm, for the manufacture of a pharmaceutical composition useful for preventing or halting cellular proliferation in a person or an animal, wherein an effective amount of said agent is administered in an essentially non-dissociated form to the person or animal.
- 2. The use according to claim 1 wherein the agent is an agent having its dissociation constant in the range 5.0 to 7.4, preferably in the range 6.0 to 7.3; most preferably about 7.0.
  - 3. The use according to claim 1 or 2, wherein said agent is urocanic acid.
  - 4. The use according to claim 3, wherein said agent is trans-urocanic acid.

5. The use according to claim 3, wherein said agent is cis-urocanic acid.

- 6. The use according to any of the claims 1 to 5 for treatment or prevention of a disease or disorder curable by intracellular acidification inducing the inhibition or halting of cell proliferation.
- 7. The use according to claim 6 wherein the disease or disorder is a local or systemic, non-transformed or transformed hyperproliferative disease.
- 8. The use according to claim 7 wherein the disease or disorder is a local or systemic cancer selected from brain, lung, skin, bladder, gastric, pancreatic, breast, head, neck, kidney, ovarian, prostate, colorectal, oesophageal, gynaecological and thyroid cancer.
- 9. The use according to any of the foregoing claims wherein the agent is administered30 systemically or locally, preferably locally, most preferably topically.
  - 10. Use of a pharmaceutically acceptable agent as defined in any of the claims 1 to 5, as an enhancer for another therapeutically active agent.

11. Pharmaceutical composition comprising as active agent a pharmaceutically acceptable agent being able to acidify the cell cytoplasm, in combination with a pharmaceutically acceptable carrier, which carrier essentially prevents the agent from dissociating at extracellular pH values.

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- 12. The composition according to claim 11 wherein said agent is an agent having its dissociation constant in the range 5.0 to 7.4, preferably in the range 6.0 to 7.3; most preferably about 7.0.
- 13. The composition according to claim 11 or 12, wherein said agent is *trans*-urocanic acid.
  - 14. The composition according to claim 11 or 12, wherein said agent is cis-urocanic acid.
- 15. The composition according to any of the claims 11 to 14, wherein said composition additionally comprises another therapeutically active agent, preferably an anti-proliferative or anticancer agent.